

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-46 (cancelled)

47. (New) A method for collecting information relating to a communication network, the method comprising:

detecting data conveyed by detected nodes operating in the communication network in a manner that is transparent to the detected nodes;

analyzing detected data for identifying nodal information relating to the detected nodes and for identifying missing information; and querying one or more queried nodes for the missing information.

48. (New) The method of Claim 47. wherein:

there are received other data relating to the communication network;

and

the analyzing detected data analyzes also the other data for identifying the missing information.

49. (New) The method of Claim 47, wherein the nodal information includes operating system information relating to operating systems operating on nodes.

50. (New) The method of Claim 49, wherein the nodes are included in at least one of the following: detected nodes and queried nodes.

51. (New) The method of Claim 49, wherein detecting data includes detecting at least one type of message from a group including DHCP (Dynamic Host Configuration Protocol) messages and SYN packets.

52. (New) The method of Claim 49, wherein analyzing includes:

receiving data corresponding to data conveyed by a detected node; inspecting received data for characteristics of a known operating system; and

if inspecting reveals that the data conforms with the characteristics, indicating that the known operating system operates on the detected node.

53. (New) The method of Claim 47, wherein the nodal information includes runtime information relating to running processes.

54. (New) The method of Claim 53, wherein runtime information relating to running processes include at least one from the following: information relating to network running processes operating on the detected nodes and information relating to local running processes operating on the detected nodes.

55. (New) The method of Claim 47, wherein the nodal information includes hardware information relating to hardware components associated with the respective detected nodes.

56. (New) The method of Claim 47, wherein the nodal information includes topology of the communication network.

57. (New) The method of Claim 47, wherein querying includes:

generating a query message corresponding to the missing information for sending to queried nodes.

58. (New) The method of Claim 57, wherein querying further includes:

receiving at least one response that corresponds to the query message; and

processing the at least one response to retrieve information corresponding to the missing information.

59. (New) The method of Claim 57, wherein the query message is one of the following: an ARP (Address Resolution Protocol) request, an ICMP (Internet Control Message Protocol) echo request and a TCP-SYN request.

60. (New) The method of Claim 57, wherein generating is done in accordance with a test policy and wherein the test policy is selected from a group of available test policies.

61. (New) The method of Claim 57, wherein generating is done in accordance with a test policy and wherein the test policy is selected in accordance with a statistical computation.

62. (New) The method of Claim 57, wherein said missing information relates to at least one running process operating on respective queried nodes.

63. (New) The method of Claim 57, wherein detected nodes include at least one queried node and the data conveyed by detected nodes includes at least one response that corresponds to the query message.

64. (New) A network information collector for collecting information relating to a communication network, the system comprising:

a network detector for detecting data conveyed by detected nodes operating in the communication network in a manner that is transparent to the detected nodes;

an analyzer for analyzing detected data for identifying nodal information relating to the detected nodes and for identifying missing information; and

a query engine for querying one or more nodes queried nodes for the missing information.

65. (New) The network information collector of Claim 64, further including;

an input device for receiving other data relating to the communication network; and

wherein the analyzer is configured to analyze also the other data for identifying the missing information.

66. (New) The network information collector of Claim 64, wherein the analyzer is configured to analyze nodal information that includes operating system information relating to operating systems operating on detected nodes.

67. (New) The information collector of Claim 66, wherein detecting data conveyed by the detected nodes includes detecting at least one type of message from a group

including DHCP (Dynamic Host Configuration Protocol) messages and SYN packets.

68. (New) the network information collector of Claim 66, wherein analyzer includes:

an input for receiving data, the data corresponds to data conveyed by a detected node;

a data inspector coupled to said input device, the data inspector being configured to inspect received data for characteristics of a known operating system; and

a data marker coupled to said data inspector and being responsive thereto, the data marker being configured to indicate that the known operating system operates on the detected node.

69. (New) The network information collector of Claim 64, wherein the analyzer is configured to analyze nodal information that includes runtime information relating to running processes.

70. (New) The network information collector of Claim 64, wherein the query engine includes:

a query message generator for generating a query message corresponding to the missing information; and

an output device for conveying the query message to the queried nodes.

71. (New) The network information collector of Claim 70, wherein the query engine further includes:

an input device for receiving at least one response that corresponds to the query message; and

a response processor for processing the at least one response to retrieve information corresponding to the missing information.

72. (New) A program storage device readable by machine, tangibly embodying a program of instructions executable by the machine to perform method for collecting information relating to a communication network, the method comprising:

detecting data conveyed by detected nodes operating in the communication network in a manner that is transparent to the detected nodes;

analyzing detected data for identifying nodal information relating to the detected nodes and for identifying missing information; and

querying one or more queried nodes for the missing information.

73. (New) A computer program product comprising a computer useable medium having computer readable program code embodied therein for collecting information relating to a communication network, the computer program product comprising:

computer readable program code for causing the computer to detect data conveyed by detected nodes operating in the communication network in a manner that is transparent to the detected nodes;

computer readable program code for causing the computer to analyze detected data for identifying nodal information relating to the detected nodes for identifying missing information; and

computer readable program code for causing the computer to query one or more queried nodes for the missing information.